

Proceedings of the Pacific Coast Entomological Society, 1985

FOUR HUNDRED AND THIRTY-SIXTH MEETING

The 436th meeting was held Friday, 18 January 1985, at 8:10 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 14 December 1984 were read and accepted. Two persons were proposed and elected as new members: Mr. Kevin M. Spollen as a student member and Dr. Norman D. Penny as a regular member.

Dr. Edwards announced that the latest issue of *Pacific Discovery* contains an article on monarch butterflies. Mr. Vincent F. Lee read the names of three additional members who elected to be sponsoring members for 1985: Dr. Richard K. Allen, Dr. and Mrs. William E. Ferguson, and Mr. David G. Marqua. Dr. Cornelius B. Philip presented a scientific note, "A Collection of Four Species of Tabanid Flies Taken from an Anaconda Snake in Peru in May, 1984." He also announced that the latest newsletter of the Pacific Division of the American Association for the Advancement of Science mentioned the Society's participation in the Montana meetings this year.

The featured speaker Dr. Edward S. Ross, California Academy of Sciences, presented the lecture entitled "Entomological Highlights of a Recent Journey to Turkey, North Africa, and Europe." His well-illustrated slide lecture recounts part of a 26,000 mile trip taken in seven months of 1984, with emphasis on embiid collecting, *Ophrys* orchids and their pollination by scoliid wasps, and archeological sites of Tunisia, Morocco, Spain, Greece, Sicily, and Turkey.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 83 persons was present, of which 35 signed as members and 35 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND THIRTY-SEVENTH MEETING

The 437th meeting was held Friday, 15 February 1985, at 8:10 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 18 January 1985 were read and accepted. Mr. Vincent F. Lee announced that another member Dr. E. Eric Grissell had elected to be a sponsoring member for 1985. Four persons were proposed and elected as new members: Mr. Michael S. Arduser as a student member, and Mr. Tadese Gebre-Hawariat, Dr. Lee R. Johnson, and Dr. Barry M. Wilk as regular members.

Dr. Edwards announced that Mr. David L. Wagner, who gave an excellent talk on hepialids to our Society in 1984, recently won the Snodgrass Memorial Research Award from the Entomological Society of America. Mr. Jett S. Chinn presented slides showing infection of the raphidophorids *Pristoceuthophilus pacificus* (Thomas), *Pristoceuthophilus* sp., and *Ceuthophilus* sp. by the fungus *Entomophthora* sp. in Pacifica. Dr. D. Dee Wilder presented slides showing exposed combs of a honeybee colony. Dr. Edward L. Smith presented slides of sawfly (*Euura scoulerianae* E. L. Smith) and cecidomyiid (*Mayetiola* sp.) galls on willows (*Salix* sp.) and commented on the remarkable survivorship of last instar larva or prepupa of the cecidomyiid to submersion in the fixative FAA. Dr. Harvey I. Scudder announced that the Bureau of Land Management has set aside the areas in the Stewart Valley, Nevada where he had been studying insect fossils.

The featured speaker Dr. Edward S. Ross, California Academy of Sciences, presented the lecture entitled "Entomological Highlights of a Recent Journey to Turkey, North Africa, and Europe." This lecture was a continuation of the talk given in January of his trip taken in 1984, with emphasis on the Alps portion of the trip. Excellent slides on the entomology, general natural history, geology, and human culture of Europe and England were shown.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 85 persons was present, of which 38 signed as members and 33 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND THIRTY-EIGHTH MEETING

The 438th meeting was held Friday, 15 March 1985, at 8:15 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 15 February 1985 were read, corrected, and accepted. Mr. Vincent F. Lee announced that two additional members Dr. John E. Hafernik Jr. and Mr. Benjamin Keh elected to be sponsoring members for 1985. Six persons were proposed and elected as new members: Mr. Steven H. Dreistadt and Mr. David H. Jensen as student members, and Dr. Gordon Gordh, Dr. Tohko Y. Kaufman, Dr. Peter G. Mason, and Dr. Richard C. Wilkerson as regular members.

Dr. Edwards announced that the annual meeting of the Pacific Slope Section of the Lepidopterists' Society will be held in June this year at Camp Norris, San Bernardino Mountains. Mr. Dean Jamieson presented a recent collection of unusual Lepidoptera belonging to the family Alucitidae. Dr. Stanley C. Williams announced a course on beekeeping, offered by the San Francisco Community College District. Dr. Edward L. Smith announced the recent monograph on fossil scorpions by the late Dr. E. N. Kjellesvig-Waering.

The featured speaker Ms. Valerie Brown, staff entomologist, California Department of Food and Agriculture, Sacramento, presented a lecture entitled "The Status of Gypsy Moth Program in California and the Northwest." She presented information on the general biology of the gypsy moth and the current control measures taken against it, showed a movie produced in Canada on the gypsy moth, and traced the history of gypsy moth infestations in the Pacific Coast states, with special reference to California.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 34 persons was present, of which 20 signed as members and 13 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND THIRTY-NINTH MEETING

The 439th meeting was held Friday, 19 April 1985, at 8:15 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with Past President Dr. Harvey I. Scudder presiding.

The minutes of the meeting held 15 March 1985 were read, corrected, and accepted. Mr. Vincent F. Lee announced that an additional member Mr. Eric M. Fisher elected to be a sponsoring member for 1985. Five persons were proposed and elected as new members: Mr. John J. Dayton, Mr. Arthur V. Evans, and Mr. Nathan Schiff as student members, and Mr. Edmund F. Giesbert and Dr. William F. Kraus as regular members.

Dr. Edward L. Smith showed slides of a primitive crustacean and some interesting primitive insects. Dr. Kirby W. Brown showed slides of the fern and magnolia white scales.

The featured speaker Dr. Reg F. Chapman, Visiting Professor, University of California, Albany, lectured on "The Paradoxical Biology of an African Grasshopper." He presented some ingenious experiments to some interesting paradoxes in the biology of the variegated grasshopper, *Zonocerus variegatus* (Linnaeus), a native pest of the cassava plant in the rain forest belt of Nigeria.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 35 persons was present, of which 27 signed as members and 8 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND FORTIETH MEETING

The 440th meeting was held Friday, 17 May 1985, at 8:10 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 19 April 1985 were read and accepted. Mr. Vincent F. Lee announced that Mr. Arthur L. Chan elected to be a sponsoring member for 1985. Four persons were proposed and elected as new members: Mr. Craig C. Allison, Ms. Sharon S. Mead, and Mr. Curtis Y. Takahashi as student members, and Mr. William T. Pyles as a regular member.

Dr. Edwards reminded the audience about the Pacific Division of the American Association for the Advancement of Science meeting in Montana in June. Dr. Kirby W. Brown showed slides of the eggs of *Prionus californicus* Motschulsky. Mr. Larry G. Bezark showed several slides of *Cyrtopogon princeps* Osten Sacken and *C. montanus* Loew and their microhabitats near Placerville. Dr. Norman D. Penny talked about a three day trip in which he was able to collect all three species of bittacid Mecoptera of California.

The featured speaker Mr. Dean W. Jamieson, entomologist at Instar Pest Consultants, Inc., San Jose, presented a lecture entitled "Entomology, Public Health, and Pest Control." He talked about his experiences with arthropod infestations of human and human habitation when he was employed by the Santa Clara County Department of Health. Slides of human myiasis, house dust mite and other

mites causing dermatitis, and other arthropod vectors and pests were shown, and case histories were discussed. Sampling procedures and control measures were briefly described. He stressed how much misinformation and incorrect arthropod identification abound among public health workers.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 29 persons was present, of which 23 signed as members and 6 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND FORTY-FIRST MEETING

The 441st meeting was held Friday, 25 October 1985, at 8:20 p.m., in the Goethe Room, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 17 May 1985 were read and accepted. Fifteen persons were proposed and elected as new members for 1985 (those for 1986 indicated in parentheses): Mr. David A. Carmean, Mr. David L. Wagner, and Ms. Marianne A. Wong (1986) as student members; and Mr. Robert L. Allen (1986), Dr. Ranit K. Bhattacharjee (1986), Dr. John F. Burger, Mr. James W. Cornett, Mr. Parker V. Gambino, Dr. Joseph R. Holomuzki, Mr. Clive D. Jorgensen (1986), Dr. Robert W. Longair (1986), Mr. Jay W. Nelson, Dr. Laurence Packer (1986), Dr. Kenneth W. Stewart, and Dr. Leonard S. Vincent as regular members.

Mr. Larry G. Bezark announced the 1986 annual meeting of the Pacific Division of the American Association for the Advancement of Science at the University of British Columbia, Vancouver, Canada, in 8–13 June 1986, in which the Society will be a participant. Dr. Edwards reported on this year's meeting in Missoula where there was a get-together of entomologists and a field trip to Glacier National Park, led by him. Dr. Norman D. Penny reported that the eggs of two of the three species of bittacid Mecoptera of California he collected in May have not hatched yet. Dr. Ronald E. Stecker reported that Dr. William E. Ferguson wrote a long letter from South Africa. Mr. Vincent F. Lee announced three books published in 1985: J. D. Polhemus. Shore bugs (Heteroptera-Hemiptera; Saldidae); A. S. Menke and D. R. Miller (editors). Entomology of the California Channel Islands; and International Code of Zoological Nomenclature. Third edition.

The featured speaker Dr. Marjorie A. Hoy, University of California, Berkeley, presented a lecture entitled "Genetic Improvement of Biological Control Agents: Status and Prospect for Biotechnology." She gave a brief history of insects used in biological control and her own experiences with the braconid *Apanteles melanoscelus* (Ratzeburg) as a control agent for the gypsy moth, *Lymantria dispar* (Linnaeus). She talked about laboratory cross-breeding experiments to produce a heterotic strain which theoretically improves the effectiveness of the parasitoid on the moth. However, field efficacy of the heterotic strain has not yet been demonstrated. Improved resistance of the western predatory mite, *Metaseiulus occidentalis* (Nesbitt), a predator of eriophyid and tetranychid mites on almonds, grapes, and other citrus crops, to carbaryl, sulfur, and organophosphate pesticides by artificial selection techniques, showed high promises and cost effectiveness. Similar experiments have been done on the common green lacewing, *Chrysoperla carnea* (Stephens), the first insect predator selected for pesticide resistance. New biotechnological techniques with potential promise for improving the genetic stock of biological control agents, such as recombinant DNA, cell culture transformation, virus vector, and minichromosomes, were briefly discussed.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 42 persons was present, of which 23 signed as members and 19 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND FORTY-SECOND MEETING

The 442nd meeting was held Friday, 15 November 1985, at 8:20 p.m., in the Morrison Auditorium, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 25 October 1985 were read and accepted. Four persons were proposed and elected as new members for 1986: Mr. Patrick A. Luft and Mr. Michael P. Kennedy as student members, and Mr. Joe E. Clopton and Mr. Robert C. Wilson as regular members.

Dr. Edwards announced the formation of two ad hoc committees: the nominating committee, consisting of Dr. Marius S. Wasbauer as chairperson, and Dr. Jerry A. Powell and Dr. Ronald E. Stecker as members, and the auditing committee, with Mr. H. Vannoy Davis as chairperson, and Dr. Paul H. Arnaud Jr. and Mrs. Helen K. Court as members. Mr. Vincent F. Lee suggested that the Society purchase an automatic coffee maker and provide freshly ground coffee for the social hour. Mr.

Larry G. Bezark announced that, starting in 1986, the Society will send out newsletters, instead of postcards, to announce the upcoming Society meetings and also other entomological or related meetings, notices, etc. Dr. Edwards showed slides of beautiful butterfly art objects crafted by artisans of the Haus der Schmetterlinge in Koblenz, Federal Republic of Germany and of the Matterhorn and surrounding areas.

The featured speaker Dr. Edward J. Rogers, medical entomologist at the Disease Vector Ecology and Control Center, Naval Air Station, Alameda, presented a lecture entitled "Natural History of Dance Flies." He summarized the known information on the predatory, swarming, ballooning, dance, and mating behavior of the Empididae, with special reference to his own observations of some Californian species of *Hilara*, *Rhamphomyia*, and *Empis*. His field experiments on swarming patterns of several species of empidids demonstrated the environmental conditions under which these flies swarmed.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 45 persons was present, of which 29 signed as members and 16 as guests.—V. F. Lee, Secretary.

FOUR HUNDRED AND FORTY-THIRD MEETING

The 443rd meeting was held Friday, 13 December 1985, at 8:10 p.m., in the Goethe Room, California Academy of Sciences, Golden Gate Park, San Francisco, with President Dr. J. Gordon Edwards presiding.

The minutes of the meeting held 15 November 1985 were read and accepted. Two persons were proposed and elected as student members for 1986: Mr. Arash Agah and Mr. Michael D. Schwartz.

Dr. Edwards asked for committee reports. Mr. Vincent F. Lee reported that in 1985 the Society had 46 sponsoring members and added 11 regular and 17 student members to its membership roll. Dr. Edwards announced that Dr. John A. Chemsak will remain as editor of the journal through 1986. Dr. Jerry A. Powell announced the slate of candidates for 1986: Mr. Larry G. Bezark as president, Dr. Stanley C. Williams as president-elect, Dr. Wojciech J. Pulawski as treasurer, and Mr. Vincent F. Lee as secretary. The members present elected these candidates to their respective offices. Dr. Edwards then passed the gavel to the new president. Mr. Bezark.

Mr. Lee announced that an automatic coffee maker was purchased for use during the social hour. Dr. Edward L. Smith announced that Dr. Jarmila Kukalova-Peck will be speaking on fossil insects at the February 1986 meeting. Mr. Lee announced that the Entomology Department of the Academy is offering used U.S. National Museum and Cornell insect trays for sale. He suggested that a local member might set up a small business of evaluating insect collections donated to museums.

Mr. Benjamin Keh showed slides taken from a world renowned insect zoo near Tokyo. Mr. Michael P. Kennedy showed slides of processionary caterpillars in the Vatican. Mr. Bezark reported collecting the first specimens of a European syrphid fly *Eristalinus* sp. for North America, when he attended the Entomological Society of America meetings in Hollywood, Florida. Dr. Williams announced that the Association of Biologists for Computing will be hosting a series of seminars in January 1986 at San Francisco State University. Mr. Bezark mentioned some anecdotes from Dr. Edwards's former students and himself.

The featured speaker Dr. J. Gordon Edwards, professor at San Jose State University, gave the presidential address entitled "Natural History of Costa Rica." He lectured on the geological, physiographic, and topographic features and showed slides of the interesting insects and flowers from his several trips to this biologist's paradise.

The social hour was held in the entomology conference room following adjournment of the meeting.

A total of 54 persons was present, of which 38 signed as members and 16 as guests.—V. F. Lee, Secretary.